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CLAIMS

What is claimed is:

- 1. A bare semiconductor die assembly including a plurality of semiconductor die, comprising:
 a substrate including a plurality of conductors;
 at least one active face-down base die in electrical communication with at least one conductor;
 at least one active face-up stack die attached back-to-back to said base die; and means for electrically connecting said stack die to at least one conductor.
- 2. The assembly of claim 1, wherein said stack die includes at least one bond pad.
- 3. The assembly of claim 2, wherein said means for electrically connecting said stack die to said at least one conductor is a bond wire extending between said at least one bond pad and said at least one conductor.
- 4. The assembly of claim 1, further comprising a first adhesive interposed between said base die and said stack die.
- 5. The assembly of claim 4, further comprising at least one discrete component adhered to said first adhesive, and a die-to-component bond wire electrically connecting said stack die to said component.
- 6. The assembly of claim 4, further comprising at least one discrete component adhered to said first adhesive, and a component-to-substrate bond wire electrically connecting said stack die to a substrate conductor.
- 7. The assembly of claim 1, further comprising a second stack die and means for electrically connecting said second stack die to a substrate conductor.

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- 8. The assembly of claim 7, wherein said second stack die includes at least one bond pad.
- 9. The assembly of claim 8, wherein said means for electrically connecting said second stack die to said substrate conductor is a bond wire extending between said at least one bond pad and said at least one conductor.
- 10. The assembly of claim 7, wherein said second stack die is attached to said stack die.
- 11. The assembly of claim 10, further comprising a second adhesive interposed between said second stack die and said stack die.
- 12. The assembly of claim 1/1, further comprising at least one discrete component adhered to said second adhesive, and a die-to-component bond wire connecting said second stack die to said component.
- 13. The assembly of claim 11, further comprising at least one discrete component adhered to said second adhesive, and a component-to-substrate bond wire connecting said component to a substrate conductor.
- 14. The assembly of claim 10, further comprising at least one discrete component adhered to said first adhesive, a die-to-component bond wire connecting said second stack die to said component, and a component-to-substrate bond wire connecting said component to a substrate conductor.
- 15. The assembly of claim 1, further comprising a second active face-down base die in electrical communication with a substrate.

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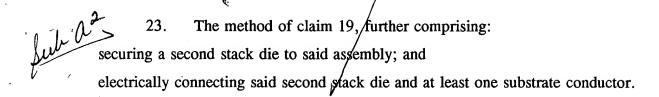
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- The assembly of claim 15, wherein at least one said stack die bridges 16. said base die and second base die.
- 17. The assembly of claim 16, further including at least one discrete component secured to said substrate, and a component-to-substrate bond wire electrically connecting said stack die/to said component.
- The assembly of claim 1, further including at least one discrete 18. component secured to said substrate, and a component-to-substrate bond wire electrically connecting said stack die to said component.
- 19. A method of fabricating a multi-die assembly, comprising: providing a substrate including a plurality of conductors; attaching at least one active face-down base/die to said substrate in electrical communication with at least some of said conductors; securing the back side of at least one active face-up stack die to said base die; and electrically connecting said stack die to at least one of said conductors.
- The method of claim 19, wherein said electrically connecting said at 20. least one stack die to said at least one conductor comprises wire bonding.
- July as 21. The method of claim 19, further comprising: securing at least one discrete component to said base die; and extending a die-to-component bond/wire between said at least one stack die and said component.
 - The method of claim 19, further comprising: 22. securing at least one discrete component to said base die; and extending a component-to-substrate bond wire between said component and a substrate conductor.

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- 24. The method of claim 23, wherein electrically connecting said second stack die to said at least one conductor comprises wire bonding.
- The method of claim 23, further comprising securing said second stack die to said stack die.
 - 26. The method of claim 25, further comprising: securing at least one discrete component to said stack die; and extending a die-to-component bond wire between said second stack die and said component.
 - The method of claim $26\sqrt{\text{further comprising:}}$ 27. securing at least one discrete component to said stack die; and extending a component-to-substrate bond wire between said component and a substrate conductor.
 - 28. The method of claim 25, further comprising: securing at least one discrete component to said base die; and extending a die-to-component bond wire between said second stack die and said component.
 - 29. The method/of claim 25, further comprising: securing at least one discrete component to said base die; and extending a component-to-substrate bond wire between said component and a conductor.

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30. The method of claim 19, further comprising attaching a second active face-down base die to said substrate in electrical communication with at least one of said conductors.

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31. The method of claim 30, further comprising bridging said stack die between said base die and second base die.

- 32. The method of claim 31, further comprising securing a second stack die over said stack die.
- 33. The method of claim 19, further comprising: securing at least one discrete component to said substrate; and extending a die-to-component bond wire between said at least one stack die and said component.
- 34. The method of claim 31, further comprising: securing at least one discrete component to said substrate; and extending a die-to-component bond wire between said at least one stack die and said component.